

Appln. Serial No. 10/751,017  
Reply to Office Action Mailed December 15, 2006

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REMARKS

In the Office Action dated December 15, 2006, claims 4-7 and 12-14 were objected to; claims 1-3, 8-11, and 15-20 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 5,713,020 (Reiter) in view Admitted Prior Art (APA).

Applicant acknowledges the indication that claims 4-7 and 12-14 contain allowable subject matter.

The obviousness rejection of independent claim 1 over Reiter and APA (alleged Admitted Prior Art) has been maintained in the present Office Action. Applicant respectfully submits that the Response to Arguments section on pages 7-9 of the Office Action does not address a fundamental defect of the obviousness rejection raised in the previous Reply to Office Action. Namely, Reiter fails to disclose receiving a query that specifies an aggregate *on distinct values* of at least one attribute, the query further specifying grouping on plural grouping sets, the plural grouping sets having at least a first grouping set and a second grouping set; and identifying *distinct values* of the at least one attribute and storing the *distinct values* of the at least one attribute in a first table.

The Office Action cited column 4, lines 34-37, of Reiter as disclosing a query that specifies an aggregate *on distinct values* of at least one attribute. Column 4 refers to a multiple-level aggregation query, such as in the form of Table 1, which includes a GROUP BY clause that specifies a level number. Column 5 of Reiter shows an example query (*see* Table 2 in column 5 of Reiter). In this example query, several aggregations are specified, all of which pertain to the sum() aggregation. The aggregation is performed on Order Amount, with absolutely no indication that the sum is performed on distinct values of Order Amount. Therefore, it is clear that Reiter does not teach receiving a query that specifies an aggregate *on distinct values* of at least one attribute.

In fact, the query in column 5 of Reiter sums *all* attribute values, not just *distinct* values. For example, as stated in column 5, at lines 24-25, of Reiter: "the query contains a sum of order amounts for *all* of the rows in the source table." In column 2, in connection with the discussion of an aggregate function that can be contained in a SQL query, Reiter states that the aggregating function "performs some operation on the values of *all* of the fields in that column from the rows of the source table ...." Reiter, 2:24-27. Thus, it is clear that the queries referred to in Reiter are

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queries that aggregate all values of at least one attribute, not *distinct* values of at least one attribute, to form groups.

This fundamental difference between the teachings of Reiter and the subject matter recited in claim 1 strongly indicates that the hypothetical combination of Reiter and APA clearly does not teach or suggest all elements of claim 1.

In response to Applicant's arguments that there did not exist any motivation or suggestion to combine the teachings of Reiter and APA, the Office Action argued that impermissible hindsight was not used, and that claims are to be given "the broadest reasonable interpretation consistent with the specification ...." 12/15/2006 Office Action at 9. However, the Office Action did not address Applicant's arguments that the APA actually *teaches away* from the claimed invention.

The Office Action cited ¶ [0006], on page 3, of the present specification (alleged to be APA) as disclosing the storing of distinct values of the at least one attribute in a first table. It is submitted that the objective evidence clearly establishes that no motivation or suggestion existed to combine the teachings of Reiter and APA. Paragraph [0007] of APA provides an explicit teaching that the approach described in ¶¶ [0005] and [0006] of APA "cannot be used if the SQL statement specifies that an aggregate be calculated on *distinct* values of a particular attribute ...." Thus, the APA expressly taught away from using the technique in ¶ [0006] of APA in the context of what is recited in claim 1, namely in the context of a query that specifies an aggregate on *distinct* values of at least one attribute.

As stated by the M.P.E.P., "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." M.P.E.P. § 2141.02 (8<sup>th</sup> ed., Rev. 5), at 2100-132. In fact, "[i]t is improper to combine references where the references teach away from their combination." M.P.E.P. § 2145, at 2100-169.

Thus, the APA provides objective evidence that a person of ordinary skill in the art would not have been motivated to modify the teachings of Reiter with the teachings of APA to achieve the claimed subject matter.

In view of the foregoing, a *prima facie* case of obviousness has not been established with respect to claim 1. Independent claims 8 and 15 are allowable for similar reasons. Dependent claims are allowable for at least the same reasons as corresponding independent claims.

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Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 14-0225 (11087).

Respectfully submitted,

Date: 2-15-2007

  
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